

**(2010 scheme)**

**PHYSIOLOGY**

**Time : 3 hrs**

**Max marks : 100**

- **Answer all questions**
- **Draw diagrams wherever necessary**

**Essays: (2x10=20)**

1. Describe in detail the composition, functions and regulation of pancreatic juice.
2. Draw the structure of nephron. Explain the mechanism of urine formation.

**Short notes: (10x5=50)**

3. Coronary circulation
4. Excitation-contraction coupling
5. Posterior pituitary hormones
6. Lung volumes and capacities
7. Functions of liver
8. Spermatogenesis
9. Cerebrospinal fluid
10. Dialysis
11. Myxoedema
12. Cell organelles

**Answer briefly: (10x3=30)**

13. Bell magendie law
14. Anticoagulants
15. Cholecystokinin-pancreozymin
16. Diabetes mellitus
17. Eosinophilia
18. Hormones regulating calcium homeostasis
19. Resting membrane potential
20. Hering-bruer's reflex
21. Colour vision
22. Definition of cardiac output

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